

10/633,843. *Cofc*

Knobbe Martens Olson & Bear LLP

Intellectual Property Law

550 West C Street
Suite 1200
San Diego CA 92101
Tel 619-235-8550
Fax 619-235-0176
www.kmob.com

Michael L. Fuller
619-687-8639
mfuller@kmob.com



January 3, 2007

ATTN: Certificate of Correction Branch
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Re: Title: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
SOLUBLE EXPRESSION
Letters Patent No. 7,132,530
Issued: November 7, 2006
Applicant Reference: RTS-0242US.C1 (ISIS.030C1)

Certificate

JAN 10 2007

of Correction

Dear Sir:

Enclosed for filing, please find the following:

- (X) Remarks on the Certificate of Correction Pursuant to 37 C.F.R §1.323
- (X) Certificate of Correction Pursuant to 37 C.F.R §1.323 in connection with the above-identified patent
- (X) Request to Correct Inventorship pursuant to 37 C.F.R §1.324
- (X) Statement Confirming No Deceptive Intent pursuant to 37 C.F.R §1.324(b)(1) on the part of the added inventor, Susan M. Freier
- (X) Statement pursuant to 37 C.F.R §1.324(b)(2) from the current named inventor, C. Frank Bennett
- (X) Statement pursuant to 37 C.F.R §1.324(b)(2) from the current named inventor, Kenneth W. Dobie
- (X) Statement from the Assignee pursuant to 37 C.F.R §1.324(b)(3)
- (X) Statement Under 37 C.F.R §3.73(b)
- (X) Assignment executed by the added inventor

Knobbe Martens Olson & Bear LLP

Honorable Commissioner of
Patents and Trademarks
January 3, 2007

Page -2-

(X) A check for \$230

(X) \$100 fee as set forth in 37 C.F.R. § 1.20 (a)


(X) \$130 as the fee set forth in 37 C.F.R. § 1.20(b)

(X) Return pre-paid postcard

Please charge any additional fees, including any fees for additional extension of time, or credit overpayment to Deposit Account No. 11-1410.

Respectfully submitted,

Knobbe, Martens, Olson & Bear, LLP


Michael D. Fuller
Registration No. 36,516
Customer No. 55,389

Enclosures

3208294
121306



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Patent No. : 7,132,530
Appl. No. : 10/633,843
Issue Date : November 7, 2006
Inventors : C. Frank Bennett; Kenneth W. Dobie
For : Antisense Modulation of Superoxide
Dismutase 1, Soluble Expression

REQUEST FOR CERTIFICATE OF CORRECTION PURSUANT TO 37 CFR §1.323

ATTN: Certificate of Correction Branch
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

REMARKS

Applicants hereby request, pursuant to 37 C.F.R. §1.323, that a Certificate of Correction be issued in the above-captioned patent as indicated in the accompanying sheet in two pages. The fee set forth in 37 C.F.R. § 1.20(a) is enclosed herewith. For the reasons stated below, Applicants believe that the requested corrections comply with the statutory requirements of 35 U.S.C. § 255, as the corrections are of a minor character and do not involve a change which would constitute new matter or require reexamination.

Applicants note that during prosecution, Claim 13 of the issued patent was amended by an Examiner's Amendment to substitute "antisense compound" for "antisense oligonucleotide" in line 21 of Claim 13 of the issued patent. This was done because dependent Claims 14-19 referred to the "compound" of Claim 13. This amendment inadvertently removed the antecedent basis for "antisense oligonucleotide" in Claim 13 of the issued patent, at line 26, as well as in dependent claims 14, 17, and 19. The requested correction to Claim 13 simply corrects this error by stating that the compound of Claim 13 is an antisense oligonucleotide. In addition, deletion of Claim 22 is requested because the compound of claim 14 is an antisense oligonucleotide, and therefore the phrase "wherein the compound is an antisense oligonucleotide" in Claim 22 does

Patent No. : 7,132,530
Issue Date : November 7, 2006


not further limit Claim 20. Applicants therefore respectfully request that the accompanying request for a Certificate of Correction be granted.

Please charge any additional fees, including any fees for additional extension of time, or credit overpayment to Deposit Account No. 11-1410.

Respectfully submitted,

KNOBBE, MARTENS, OLSON & BEAR, LLP

Dated: January 3, 2007

By: 
Michael L. Fuller
Registration No. 36,516
Attorney of Record
Customer No. 55,389
(619) 235-8550

3165652
113006

**UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION**

PATENT NO. : 7,132,530
APPLICATION NO. : 10/633,843
ISSUE DATE : November 7, 2006
INVENTOR(S) : C. Frank Bennett; Kenneth Dobie

Page 1 of 2

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

At title page, item (56), References Cited, OTHER PUBLICATIONS, right hand column, Alisky et al. reference, please delete "lateral" and insert therefore --lateral--

At title page, item (74), Attorney, Agent, or Firm, please delete "Knobbe Martens Olson & Bear LLP" and insert therefore --Isis Pharmaceuticals, Inc. Patent Department and Knobbe Martens Olson & Bear LLP--

At page 2, OTHER PUBLICATIONS, left hand column, Trotti et al. reference, please delete "SODI" and insert therefore --SOD1--

At column 9, line 18, please delete "-CH₂-O-N(CH₃) -CH₂-" and insert therefore --CH₂-O-N(CH₃)-CH₂--

At column 9, line 34, please delete "O(CH₂)_nCH₃" and insert therefore --O(CH₂)_nCH₃--

At column 9, line 61, please delete "(-CH₂)_n" and insert therefore --(-CH₂)_n--

At column 20, line 16, please delete "(S0750)" and insert therefore --(SO750)--

At column 20, line 17, please delete "(DA0750)" and insert therefore --(DAO750)--

At column 29, line 47, please delete "2'-deoxy-21-fluoroadenosine" and insert therefore --2'-deoxy-2'-fluoroadenosine--

At column 31, line 17, please delete "2'-O-Methoxyethyl-51-O-dimethoxytrityl-5-methyluri-" and insert therefore --2'-O-Methoxyethyl-5'-O-dimethoxytrityl-5-methyluri---

At column 32, line 23, please delete "L) Tetrazole" and insert therefore --L). Tetrazole--

At column 35, line 41, please delete "bamoyl-2'-O-([2-phthalamidoxy]ethyl)-5'-O-(4,4'-" and insert therefore --bamoyl-2'-O-([2-phthalamidoxy]ethyl)-5'-O-(4,4'---

At column 36, line 65, please delete "31-Deoxy-3'-amino" and insert therefore --3'-Deoxy-3'-amino--

MAILING ADDRESS OF SENDER:

Michael L. Fuller
KNOBBE, MARTENS, OLSON & BEAR, LLP
2040 Main Street, 14th Floor
Irvine, California 92614

DOCKET NO. RTS-0242US.C1

**UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION**

PATENT NO. : 7,132,530
APPLICATION NO. : 10/633,843
ISSUE DATE : November 7, 2006
INVENTOR(S) : C. Frank Bennett; Kenneth Dobie

Page 2 of 2

At column 40, line 48, please delete "TCCGTCATCGCTCCTCAGGG" and insert therefore --
TCCGTCATCGCTCCTCAGGG--

At column 40, lines 52-53, please delete "ATGCATTCTGCCCCCAAGGA" and insert therefore --
ATGCATTCTGCCCCCAAGGA--

At column 41, line 12, please delete "poly(A)+mRNA" and insert therefore --poly(A)+ mRNA--

At column 41, line 56, please delete "Poly(A)+mRNA" and insert therefore --Poly(A)+ mRNA--

At column 41, line 57, please delete "Poly(A)+mRNA" and insert therefore --Poly(A)+ mRNA--

At column 41, line 59, please delete "poly(A)+mRNA" and insert therefore --poly(A)+ mRNA--

At column 43, line 52, please delete "MULV" and insert therefore --MuLV--

At column 87, Claim 9, line 43, please delete "chiracric" and insert therefore --chimeric--

At column 88, Claim 13, line 24, please delete "NO;3)" and insert therefore --NO:3)--

At column 88, Claim 13, line 25, after "SEQ ID NO. 15" please insert --, wherein said antisense compound is an antisense oligonucleotide,--

At column 88, Claim 22, lines 46-47, please delete "22. The composition of claim 20 wherein the compound is an antisense oligonucleotide."

3165347
113006

MAILING ADDRESS OF SENDER:

Michael L. Fuller
KNOBBE, MARTENS, OLSON & BEAR, LLP
2040 Main Street, 14th Floor
Irvine, California 92614

DOCKET NO. RTS-0242US.C1



RTS-0242US.C1

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Patent No. : 7,132,530
Appl. No. : 10/633,843
Issue Date : November 7, 2006
Inventors : C. Frank Bennett; Kenneth W. Dobie
For : Antisense Modulation of Superoxide
Dismutase 1, Soluble Expression

REQUEST TO CORRECT INVENTORSHIP

Pursuant to 37 C.F.R. §1.324

ATTN: Certificate of Correction Branch
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

Applicants hereby request, pursuant to 37 C.F.R. §1.324, and in compliance with 37 C.F.R. §1.324(b), to have Susan M. Freier added as a named inventor to the above-identified patent. Susan M. Freier is a citizen of the United States of America, residing in San Diego, CA. Applicants submit that the inventorship error occurred without deceptive intent on the part of the omitted inventor.

Additionally, Applicants hereby request, pursuant to 37 C.F.R. §1.324, and in compliance with 37 C.F.R. §1.324(b), to remove Kenneth W. Dobie as a named inventor in this patent.

The inventors of U.S. Patent No. 7,132,530 should be listed as follows:

C. Frank Bennett and Susan M. Freier.

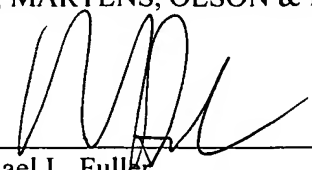
Included herewith are a Statement Confirming No Deceptive Intent on the part of the added inventor pursuant to 37 C.F.R. § 1.324(b)(1), a Statement from the current named inventors pursuant to 37 C.F.R. § 1.324(b)(2), a Statement from the Assignee pursuant to 37 C.F.R. § 1.324(b)(3), a Statement Under 37 § CFR 3.73(b), an Assignment executed by the added inventor, and the fee set forth in 37 C.F.R. § 1.20(b).

Please charge any additional fees, including any fees for additional extension of time, or credit overpayment to Deposit Account No. 11-1410.

Respectfully submitted,

KNOBBE, MARTENS, OLSON & BEAR, LLP

Dated: January 3, 2007

By: 
Michael L. Fuller
Registration No. 36,516
Attorney of Record
Customer No. 55,389
(619) 235-8550

3165633
113006



RTS-0242US.C1

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Patent No.	: 7,132,530
Appl. No.	: 10/633,843
Issue Date	: November 7, 2006
Inventors	: C. Frank Bennett; Kenneth W. Dobie
For	: Antisense Modulation of Superoxide Dismutase 1, Soluble Expression

STATEMENT CONFIRMING NO DECEPTIVE INTENT

Pursuant to 37 C.F.R. §1.324(b)(1)

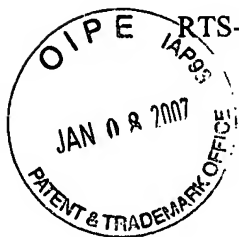
ATTN: Certificate of Correction Branch
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

The inventorship error of failing to include Susan M. Freier as an inventor of patent 7,132,530 occurred without any deceptive intention on the part of Susan M. Freier.

Signed this 11 day of Dec, 2006 by Susan M Freier

Susan M. Freier



RTS-0242US.C1

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Patent No. : 7,132,530
Appl. No. : 10/633,843
Issue Date : November 7, 2006
Inventors : C. Frank Bennett; Kenneth W. Dobie
For : Antisense Modulation of Superoxide
Dismutase 1, Soluble Expression

STATEMENT PURSUANT TO 37 C.F.R. §1.324(b)(2)

ATTN: Certificate of Correction Branch
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

I, C. Frank Bennett, hereby acknowledge the request to add Susan M. Freier as a named inventor, and to remove Kenneth W. Dobie as a named inventor, to U.S. Patent No. 7,132,530. I further state that I agree to the requested change in inventorship.

Signed this 11 day of December 2006 by C. Frank Bennett
C. Frank Bennett

RTS-0242US.C1

PATENT



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Patent No. : 7,132,530
Appl. No. : 10/633,843
Issue Date : November 7, 2006
Inventors : C. Frank Bennett; Kenneth W. Dobie
For : Antisense Modulation of Superoxide
Dismutase 1, Soluble Expression

STATEMENT PURSUANT TO 37 C.F.R. §1.324(b)(2)

ATTN: Certificate of Correction Branch
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

I, Kenneth W. Dobie, hereby acknowledge the request to add Susan M. Freier as a named inventor, and to remove myself as a named inventor, to U.S. Patent No. 7,132,530. I further state that I agree to the requested change in inventorship.

Signed this 6 day of DEC, 2006 by 

Kenneth W. Dobie

RTS-0242US.C1

PATENT



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Patent No. : 7,132,530
Appl. No. : 10/633,843
Issue Date : November 7, 2006
Inventors : C. Frank Bennett; Kenneth W. Dobie
For : Antisense Modulation of Superoxide
Dismutase 1, Soluble Expression

STATEMENT FROM ASSIGNEE

Pursuant to 37 C.F.R. §1.324(b)(3)

ATTN: Certificate of Correction Branch
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

I hereby assert that I am authorized to act on behalf of the assignee, Isis Pharmaceuticals Inc., 1896 Rutherford Road, Carlsbad, California, 92008, the owner of the entire right, title and interest in U.S. Patent No. 7,132,530 (see attached Statement under 37 C.F.R. § 3.73(b)). I further hereby assert that the assignee agrees to the inventorship change in U.S. Patent No. 7,132,530 to the following inventive entity:

C. Frank Bennett and Susan M. Freier

Signed this 13th day of Dec, 2006 by

Grantland E. Bryce
Vice President, Legal and General Counsel
Isis Pharmaceuticals, Inc.
1896 Rutherford Rd.
Carlsbad, CA 92008-7208



STATEMENT UNDER 37 CFR 3.73(b)

Applicant/Patent Owner: Isis Pharmaceuticals, Inc.

Application No./Patent No.: 7,132,530 Filed/Issue Date: November 7, 2006

Entitled: **ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1, SOLUBLE EXPRESSION**

Isis Pharmaceuticals, Inc., a Corporation
(Name of Assignee) (Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)

- states that it is:
- 1. ☒ the assignee of the entire right, title, and interest; or
 - 2. ☐ an assignee of less than the entire right, title and interest.
The extent (by percentage) of its ownership interest is _____ %

in the patent application/patent identified above by virtue of either:

A. ☒ An assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the United States Patent and Trademark Office at Reel 11953/18616, Frame 0651/0486, or for which a copy thereof is attached.

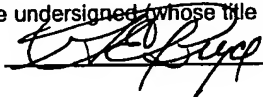
OR
B. ☐ A chain of title from the inventor(s), of the patent application/patent identified above, to the current assignee as shown below:

- 1. From: _____ To: _____
The document was recorded in the United States Patent and Trademark Office at Reel _____, Frame _____, or for which a copy thereof is attached.
- 2. From: _____ To: _____
The document was recorded in the United States Patent and Trademark Office at Reel _____, Frame _____, or for which a copy thereof is attached.
- 3. From: _____ To: _____
The document was recorded in the United States Patent and Trademark Office at Reel _____, Frame _____, or for which a copy thereof is attached.

☐ Additional documents in the chain of title are listed on a supplemental sheet.

☐ Copies of assignments or other documents in the chain of title are attached.
[NOTE: A separate copy (i.e., a true copy of the original assignment document(s)) must be submitted to Assignment Division in accordance with 37 CFR Part 3, if the assignment is to be recorded in the records of the USPTO. See MPEP 302.08]

The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee.

 12/13/06
Signature Date

Grantland E. Bryce 760-931-200
Printed or Typed Name Telephone Number

Vice President, General and Legal Counsel
Title

This collection of information is required by 37 CFR 3.73(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

**COPY
DO NOT RECORD**

DOCKET NO.: RTS-0242US.C1

PATENT

ASSIGNMENT

WHEREAS, I/we, **Susan M. Freier of San Diego, CA**, has/have invented a certain invention entitled **ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1, SOLUBLE EXPRESSION**, United States Patent number 7,132,530, issued November 7, 2006; and

WHEREAS, **ISIS Pharmaceuticals, Inc.** hereinafter referred to as the assignee, of 1896 Rutherford Road, Carlsbad CA, a corporation of Delaware, is desirous of acquiring the entire right, title and interest in and to the said inventions or improvements and in and to the said application, and in, to and under any and all Letters Patent which may be granted on or as a result thereof in any and all countries:

NOW, THEREFORE, for and in consideration of the sum of One Dollar (\$1.00) to each of us in hand paid by said assignee, and other good and valuable consideration, the receipt of which is hereby acknowledged, we, the said assignors, have sold, assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set over to said assignee, the entire right, title and interest in and to said inventions or improvements and said application and any and all continuations, divisions and renewals of and substitutes for said application, and in, to and under any and all Letters Patent which may be granted on or as a result thereof in the United States and any and all other countries, and any reissue or reissues or extension or extensions of said Letters Patent, and assign to and authorize said assignee, to file in our names applications for Letters Patent in all countries, the same to be held and enjoyed by said assignee, its successors, assigns, nominees or legal representatives, to the full end of the term or terms for which said Letters Patent respectively may be granted, reissued or extended, as fully and entirely as the same would have been held and enjoyed by us had this assignment, sale and transfer not been made.

AND we hereby covenant that we have full right to convey the entire interest herein assigned,

ASSIGNMENT - Page 1 of 3

**COPY
DO NOT RECORD**

AND we hereby covenant that we have full right to convey the entire interest herein assigned, and that we have not executed and will not execute any agreement in conflict herewith, and we further covenant and agree that we will each time request is made and without undue delay, execute and deliver all such papers as may be necessary or desirable to perfect the title to said inventions or improvements, said application and said Letters Patent to said assignee, its successors, assigns, nominees, or legal representatives, and each of us agrees to communicate to said assignee or to its nominee all known facts respecting said inventions or improvements, said application and said Letters Patent, to testify in any legal proceedings, to sign all lawful papers to execute all disclaimers and divisional, continuing, reissue and foreign applications, to make all rightful oaths, and generally to do everything possible to aid said assignee, its successors, assigns, nominees and legal representatives to obtain and enforce for its or their own benefit proper patent protection for said inventions or improvements in any and all countries.

AND we hereby authorize and request the Commissioner of Patents and Trademarks of the United States and any official of any country or countries foreign to the United States whose duty it is to issue patents on applications as aforesaid, to issue to said assignee, as assignee of the entire right, title and interest, any and all Letters Patent for said inventions or improvements, including any and all Letters Patent of the United States which may be issued and granted on or as a result of the application aforesaid, in accordance with the terms of this assignment.

IN WITNESS WHEREOF, we have hereunto set our hands and seals.

Dated: 12-Dec 2006

Susan Freier

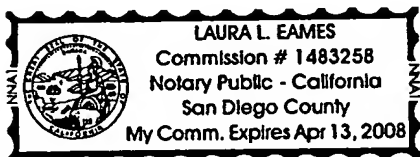
Susan M. Freier

State of California)

County of San Diego)

ss.

On this 12th day of December, 2006, before me, the undersigned, a Notary Public for the state, personally appeared **Susan M. Freier**, personally known to me/proved to me on the basis of satisfactory evidence to be the person who subscribed the foregoing Assignment and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the Assignment the person, or the entity on behalf of which the person acted, executed the Assignment.



WITNESS my hand and official seal.

Laura Eames

Signature of Notary